P&G Case CM1905Q

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of	:	
Andreas Flohr	:	Confirmation No. 6376
Serial No. 09/786,080	:	Group Art Unit 3761
Filed February 28, 2001	:	Examiner Catharine L. Anderson

For Strong And Soft Apertured Nonwoven Web

BRIEF ON APPEAL

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed, pursuant to 37 C.F.R. 1.192(a), is Appellant's brief on Appeal for the above application. The Brief is being forwarded in triplicate.

The fee for this Brief on Appeal is $330.00 37 CFR 1.17(c).

The Director is hereby authorized to charge the above fee, or any additional fees that may be required, or credit any overpayment to Deposit Account No. 16-2480 in the name of The Procter & Gamble Company. A duplicate copy of this sheet is enclosed.

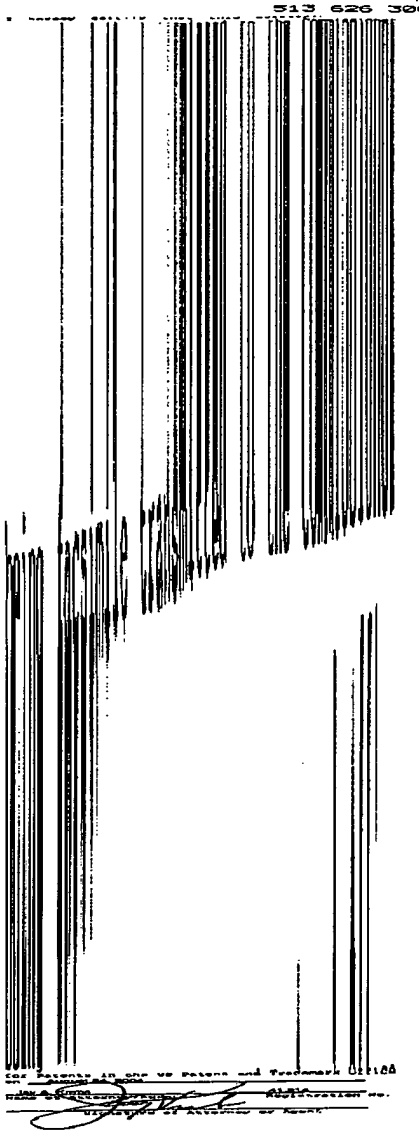
Respectfully submitted,

By _____
Jay A. Krebs
Attorney for Applicant(s)
Registration No. 41,914
(513) 626-4856

Date: August 24, 2004

Customer No. 27752

(BriefonAppealTrans.doc)
(Last Revised 3/30/2004)



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The Assistant Commissioner for Patents
Washington, DC 20231

APPEAL BRIEF

Dear Sir:

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1. Real Party in Interest

The real party in interest is The Procter & Gamble Company.

2. Related Appeals and Interferences

None known.

3. Status of Claims

Claims 1-17 are finally rejected under 35 U.S.C. 103 and appealed.

4. Status of Amendments

No amendments were made after Final Rejection.

5. Summary of the Invention

Appellant's claimed invention (see claims 1 and 12 which are representative) relates to a nonwoven web and a process for making said nonwoven web both strong and soft. (page 1, lines 9-11). Specifically, the appellant's claimed invention relates to the amount of bonded area of the nonwoven web. (page 2, lines 15-17).

A nonwoven web (Figure 1, item 40; Figures 2-4, item 240) comprises a fibrous material formed from a fusible plurality of fibers or filaments. (page 8, lines 13-14). These filaments are bonded together to form bonded areas "comprised of many individual

bonds." (*See* page 8, lines 9-15). The amount of bonded area of a thermally bonded nonwoven web can determine both the tensile strength and the softness of the nonwoven web. (page 1, lines 23-25). An increase in the bonded area of the nonwoven web creates a decrease in the softness of the nonwoven web but an increase in the tensile strength of the nonwoven web. (page 1, lines 24-25). Contrarily, a decrease in the bonded area of the nonwoven web causes an increase in the softness of the nonwoven web while decreasing the tensile strength of the nonwoven web. (page 1, lines 25-26).

The nonwoven web (Figure 1, item 40; Figures 2-4, item 240) of the present invention comprises a first zone (Figure 1, item 70; Figures 3-4, item 270; Figure 6, item 370) and a second zone (Figure 1, item 72; Figures 3-4, item 272; Figure 6, item 372) which each have a different bonded area. (page 2, lines 13-15; page 7, lines 30-32). The first zone, which may include a central zone, (Figure 1, item 70; Figures 3-4, item 270; Figure 6, item 370) has a lower bonded area than the second zone. (page 7, lines 12-14; page 7, lines 30-32 through page 8, lines 1-2). In one specific embodiment, the central zone has a bonded area which ranges from 5% to 12%. (page 8, lines 3-4).

The first zone further comprises a plurality of apertures (Figure 1, item 46, Figure 4, item 246) and an open area of at least about 10%. (page 8, lines 24-26; page 9, lines 3-4). The apertures have an effective size of at least about 0.2 mm^2 but may have an effective size of at least 1.0 mm^2. (page 8, lines 26-29).

The second zone or outer zone has a higher bonded area than the first zone such that the second zone has a higher tensile strength than does the first zone. (page 7, lines 12-16; lines 19-25). In one specific embodiment, the bonded area of the second or outer zone may range from 15% to 25%. (page 8, lines 4-5).

The method of the present invention achieves a nonwoven web which initially has a uniform bonded area and adds additional bonds to only the outer zones of the nonwoven web thereby increasing the tensile strength of the outer zones. (page 12, lines 5-7). The process further achieves apertures in the nonwoven web. (page 12, lines 26-28).

6. Issues

Are claims 1-17 obvious under 35 U.S.C. §103 over U.S. Patent No. 5,746,729 issued to Wada et. al in view of U.S. Patent No. 3,929,135 issued to Thompson?

7. Grouping of Claims

The claims stand or fall together.

8. Arguments

I. The Final Office Action does not properly reject claims 1-17 under 35 U.S.C. § 103 over Wada et. al in view of Thompson because there is no motivation to make the suggested combination of references and because the cited combination of references does not teach all of the claim limitations of the claimed invention.

In order to establish a *prima facie* case of obviousness, three requirements must be met. MPEP §2143. First, there must be some suggestion or motivation, either in the cited references or in the knowledge generally available to one ordinarily skilled in the art, to modify the reference. *Id.* Second, there must be some reasonable expectation of success. *Id.* Third, the cited references must teach or suggest all of the claim limitations. *Id.*

A. The Final Office Action fails to establish a *prima facie* case of obviousness because there is no motivation to modify the reference to render the claimed invention.

There can be no suggestion to combine when a reference teaches away from its combination with another reference. *See In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994). A reference teaches away "when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *Id.* A reference may also teach away "if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." *Id.*

The Final Office Action provides:

> Wada discloses all aspects of the claimed invention but remains silent as to the apertures. Wada discloses a nonwoven web 11, as described in column 2, lines 37-39, comprising a first zone 6 and a second zone 7, each having a bonded area comprising bonds 15, as shown in figure 3 The bonded area of the second zone 7 is greater than that of the first zone 6, as shown in figure 1. The first zone 6 has an effective open area of at least 10%, as shown in figure 1. The nonwoven web 11 further comprises a plurality of apertures 10, as shown in figure 3.
>
> Thompson discloses a topsheet 22 of an absorbent article, as shown in figure 1. The topsheet 22 comprises a plurality of apertures 26, as shown in figures 2-4, the

> apertures 26 having an effective size of at least 0.2 mm^2 as disclosed in column 4, lines 34-36. The topsheet 22 comprising apertures 26 disclosed by Thompson allows rapid flow of fluids while preventing movement of moisture back through the topsheet 22, as disclosed in column 5, lines 18-50.
>
> It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the topsheet of Wada with the apertures of Thompson, to allow rapid flow of fluids while preventing movement of moisture back through the web.
> (Final Office Action, pages 2-3).

While the Wada et. al reference teaches a nonwoven web 11 with an alleged first zone 6 and second zone 7, the Thompson reference discourages the use of nonwovens as topsheets. For example the Thompson reference teaches that when the usual nonwoven topsheet is used with a disposable diaper, the permissible loading of the absorptive pad "is somewhat higher than that which is acceptable." (col. 5, lines 9-13). In addition, the Thompson reference utilizes, in Example 1, a topsheet which is a liquid impervious ionomer film. (col. 6, lines 60-62). Similarly, the Thompson reference utilizes, in Example 3, a topsheet which is a low density polyethylene film. (col. 7, lines 16-18). Last, regarding Example 3, the Thompson reference states that the low density polyethylene film "was used in the construction of a disposable diaper" and "the disposable diaper exhibited a drier, more comfortable surface in contact with the infant **than can be obtained with a conventional hydrophobic nonwoven topsheet.**" (col. 7, lines 22-29)(emphasis added).

A person of ordinary skill in the art, upon reading the Thompson reference, would follow a direction which diverges from that taken by the appellant. Specifically, because the Thompson reference discourages the use of nonwovens, the development flowing from the suggested combination of Wada et. al and Thompson would not use a nonwoven topsheet. Specifically, the suggested combination would not produce an apertured nonwoven web with a first zone and a second zone each having differing bonded areas. Thus, the suggested combination of references teaches away from the claimed invention and therefore precludes the motivation to modify the Wada et. al reference to render the claimed invention. Consequently, the Final Office Action has failed to establish a *prima facie* case of obviousness with respect to the claimed invention.

B. Assuming *arguendo* that a motivation to combine the cited references existed, the Final Office Action still fails to establish a *prima facie* case of obviousness because the suggested combination of references does not teach or suggest all of the claim limitations of the claimed invention.

Claim 1 recites, *inter alia*, a nonwoven web comprising a first zone and a second zone each having bonded areas wherein "the bonded area of said second zone" is "greater than the bonded area of said first zone." Similarly, independent claim 12 recites, *inter alia*, "[a] method of forming a bonded nonwoven web... comprising the steps of... bonding the web in a first or central zone... bonding the web in at least one second or outer zone."

In contrast, the Wada et. al reference teaches that the "upper and lower layers are bonded together at intermittent heat-sealing spots 15 formed by thermal embossing of the surrounding zone 7." (col. 2, lines 15-18). In addition, the Wada et. al reference teaches that the central zone 6 is not subjected to any thermal embossing. (col. 2, lines 16-21). Because the Wada et. al reference teaches that the central zone 6 is not subjected to thermal embossing, the central zone 6 does not have a bonded area. Thus, the Wada et. al reference does not teach or suggest a first zone with a bonded area and a second zone with a bonded area as is recited, in part, in claims 1 and 12.

Similarly, the Thompson reference does not teach or suggest a nonwoven web which has a first zone and a second zone or an outer zone and a central zone each having bonded areas which are different. Because the Thompson reference does not teach or suggest the same claim limitations that the Wada et. al reference does not teach or suggest, the suggested combination of references does not teach or suggest all of the claim limitations of the claimed invention of claims 1 and 12. Therefore, the Final Office Action has not established a *prima facie* case of obviousness against claims 1 and 12. Moreover, because claims 2-11 and claims 13-17 depend from claims 1 and 12, respectively, the Final Office Action also failed to establish a *prima facie* case of obviousness against them as well.

Because there is no motivation to combine the suggested references and because the suggested combination of references fails to teach all of the claim limitations of claims 1 and 12, the Final Office Action fails to establish a *prima facie* case of obviousness. Thus claims 1 and 12 are nonobvious over the cited combination. Moreover, because claims 2-11 and 13-17 depend from claims 1 and 12 respectively, they too are nonobvious over the cited combination of references.

SUMMARY

None of Claims 1-17 has been properly rejected under 35 U.S.C. § 103 in light of the reasoning and analysis given in the Final Office Action. In light of all of the analysis and discussion provided above, Appellants respectfully request the Honorable Board of Patent Appeals and Interferences to reverse the rejections of Claims 1-17 and to remand the application with instructions that these claims be allowed over the cited art.

Respectfully submitted,
For: Andreas Floh

By: Jay A. Krebs
Attorney for Applicant
Reg. No. 41,914
(513) 634-1151

August 24, 2004
Cincinnati, OH

APPENDIX
CLAIMS

1. A nonwoven web, wherein said web comprises:
a first zone and at least one second zone, said first zone and said second zone having a bonded area, the bonded area of said second zone being greater than the bonded area of said first zone, said first zone having an effective open area of at least about 10 percent and a plurality of apertures, wherein each of said apertures having an effective size of at least 0.2 square millimeters.

2. The web of Claim 1 wherein said first zone comprises a central zone and said second zone comprises an outer zone.

3. The web of Claim 2 wherein said web comprises a pair of outer zones.

4. The web of either Claim 2 wherein said central zone has an effective open area of at least about 15 percent.

5. The web according to Claim 2 wherein said central zone has a plurality of apertures, wherein each of said apertures has an effective size of at least 1.0 square millimeter.

6. The web according to Claim 2 wherein said central zone has a bonded area of less than 12%.

7. The web according to Claim 2 wherein said central zone has a bonded area from 5% to 12%.

8. The web according to Claim 2 wherein said outer zones have a bonded area of greater than 15%.

9. The web according to Claim 2 wherein said outer zones have a bonded area from 15% to 25%.

10. A disposable absorbent article comprising a liquid pervious topsheet comprising the web according to Claim 1.

11. The disposable absorbent article of claim 10 further comprising a backsheet joined to said topsheet, and an absorbent core positioned between said topsheet and said backsheet.

12. A method of forming a bonded nonwoven web, said method comprising the steps of:
    a) bonding the web in a first or central zone with a bonded area;
    b) bonding the web in at least one second or outer zone with a bonded area greater than the bonded area of the central zone;
    c) aperturing the central zone such that the central zone has a plurality of apertures.

13. The method of Claim 12 wherein said central zone has an effective open area of at least about 10 percent.

14. The method of Claim 12 wherein said apertures have an effective size of at least 0.2 square millimeter.

15. The method of Claim 12 wherein said central zone has a bonded area of less than 12%.

16. The method of Claim 12 wherein said outer zones have a bonded area of greater than 15%.

17. The method of Claim 12 wherein said web comprises a pair of outer zones.

Certification of Facsimile Transmission

I hereby certify that this correspondence is being facsimile transmitted to the Commissioner for Patents in the US Patent and Trademark Office on August 24, 2004

Jay A. Krebs 41,914
Name of Attorney/Agent Registration No.

Signature of Attorney or Agent

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